

IN THE CLAIMS:

Please cancel claims 1-54 and insert the following claims:

Claims 1-54 (Currently canceled).

55. (New) A method of eliminating transmission of a transgene of interest contained within the genome of a plant, wherein the method eliminates the production of ovules containing the transgene of interest by said plant and thereby prevents transmission of the transgene of interest to seeds produced following pollination of the plant by another plant, said method comprising:

- a) producing a transformed plant that is hemizygotic but not homozygotic or heterozygotic for a nucleic acid construct comprising an ovule-specific promoter operably linked to a suicide coding region in close physical proximity to a transgene of interest;
- b) growing the plant in step a) wherein said plant only produces ovules lacking said transgene of interest; and
- c) allowing the ovules from the plant grown in step b) to be pollinated by another plant of the same species so as to produce seeds;

wherein said ovules do not contain the transgene of interest and transmission of said transgene of interest to the seeds is eliminated.

56. (New) The method of claim 55, wherein said transformed plant produces about 50% less ovules compared to a wild-type non-transformed plant of the same species.

57. (New) The method of claim 55, wherein the construct further comprises a promoter operably linked to a marker suitable for selection of the transformed plants.

58. (New) The method of claim 55, wherein said pollination is via natural cross-pollination.

59. (New) The method of claim 55, wherein said nucleic acid construct comprising a ovule-specific promoter operably linked to a suicide coding region in close physical proximity to a transgene of interest is stably integrated into the genome of said transformed plant.

60. (New) The method of claim 59, wherein said nucleic acid construct comprising the ovule-specific promoter operably linked to the suicide coding region which is in close physical proximity to the transgene of interest, are all maintained in close physical proximity to each other within the genome of the plant after being stably integrated into the genome of said plant.

61. (New) A method of plant pollination that eliminates transmission of a transgene of interest contained within the genome of a plant, wherein the method eliminates the production of ovules containing the transgene of interest by said plant and thereby prevents transmission of the transgene of interest to seeds produced by cross-pollination, said method comprising:

- a) producing a transformed plant that is hemizygotic but not homozygotic or heterozygotic for a nucleic acid construct comprising an ovule-specific promoter operably linked to a suicide coding region in close physical proximity to a transgene of interest;
- b) growing the plant in step a) wherein said plant only produces ovules lacking said transgene of interest; and
- c) allowing the ovules from the plant grown in step b) to be cross-pollinated by a second plant of the same species to produce seeds;

wherein said ovules do not contain said transgene of interest and transmission of said transgene of interest to the resultant seeds is eliminated.

62. (New) The method of claim 55 or claim 61, wherein the suicide coding region codes for a gene selected from the group consisting of the barnase gene, tasselseed2 gene and diphtheria toxin A gene.

63. (New) The method of claim 55 or claim 61, wherein the transgene of interest codes for a trait selected from the group consisting of herbicide resistance, antibiotic resistance, insecticide resistance, nitrogen fixation, altered nutrition and altered cellulose content.

64. (New) The method of claim 55 or claim 61, wherein said promoter and suicide coding region are linked to a transposable element.

65. (New) The method of claim 64, wherein the transposable element is linked to a transposase gene.

66. (New) The method of claim 55 or claim 61, wherein said transgene of interest is linked to a transposon.

67. (New) A method for enriching dispersed transposition events in a population of plant cell progeny comprising:

- a) transforming a plant cell with a nucleic acid construct comprising a male gamete- or a female gamete-specific promoter operably linked to a suicide gene to produce a transformed plant cell, wherein said promoter and said suicide gene combination is linked to a transposable element;
- b) propagating said transformed plant cell through meiosis to produce plant cell progeny in which dispersed transposition events are enriched.

68. (New) The method of claim 67, wherein the nucleic acid construct further comprises a transposase gene.

69. (New) The method of claim 67 or claim 68, wherein the nucleic acid construct further comprises a gene of interest.
70. (New) The method of claim 69, wherein the gene of interest is associated with the transposable element.
71. (New) The method of claim 67, further comprising:
c) isolating said plant cell progeny in which dispersed transposition events are enriched.
72. (New) The method of claim 67, wherein the male gamete-specific promoter is a pollen-specific promoter.
73. (New) The method of claim 67, wherein the female gamete-specific promoter is an ovule-specific promoter.
74. (New) The method of claim 67, wherein the suicide coding region codes for a gene selected from the group consisting of the barnase gene, tasselseed2 gene and diphtheria toxin A gene.
75. (New) The method of claim 69, wherein the gene of interest codes for a trait selected from the group consisting of herbicide resistance, antibiotic resistance, insecticide resistance, nitrogen fixation, altered nutrition and altered cellulose content.
76. (New) A method for enriching stably dispersed transposition events in a population of plant cell progeny comprising:
a) transforming a plant cell with a nucleic acid construct comprising a first promoter wherein the first promoter is a male gamete- or female gamete-specific promoter operably linked to a suicide gene and further comprising a nucleic acid

encoding a transposase and a nucleic acid encoding a transposon to produce a transformed plant cell;

b) propagating said transformed plant cell through meiosis to produce plant cell progeny in which stably dispersed transposition events are enriched.

77. (New) The nucleic acid construct of claim 76, wherein the transposon further comprises a second promoter operably linked to a selectable marker, wherein the selectable marker is not a suicide gene.

78. (New) The method of claim 76, further comprising:

c) isolating said plant cell progeny in which stably dispersed transposition events are enriched.

79. (New) A nucleic acid construct comprising a male gamete- or female gamete-specific promoter operably linked to a suicide gene wherein said promoter and said suicide gene combination is linked to a transposable element.

80. (New) The nucleic acid construct of claim 79, further comprising a transposase gene.

81. (New) The nucleic acid construct of claim 79 or claim 80 further comprising a gene of interest.

82. (New) The nucleic acid construct of claim 81, wherein the gene of interest is in close association with the transposable element.

83. (New) The nucleic acid construct of claim 79, wherein the transposable element is linked to a selectable marker.

84. (New) The nucleic acid construct of claim 79 wherein said promoter is selected from the group consisting of a pollen-specific promoter and an ovule-specific promoter.
85. (New) The nucleic acid construct of claim 79 wherein said suicide gene is selected from the group consisting of barnase, tasselseed2 and diphtheria toxin A gene.
86. (New) A vector comprising the nucleic acid construct of claim 79.
87. (New) A host cell comprising the vector of claim 86.
88. (New) A recombinant plant cell comprising the vector of claim 86.
89. (New) The recombinant plant cell of claim 88, wherein the recombinant plant cell is hemizygotic for the nucleic acid construct.
90. (New) A transgenic plant comprising the vector of claim 86.
91. (New) The transgenic plant of claim 90, wherein the recombinant plant cell is hemizygotic for the nucleic acid construct.